

Canan Uçkun

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| CONTACT INFORMATION | 5209 S. Kenwood Avenue Chicago, IL 60615 | <i>Mobile:</i> (773) 574-3734 canan.uckun@gmail.com |
| RESEARCH INTERESTS | Energy markets and pricing Smart grid, demand response, renewable energy, energy storage Critical and strategic materials, supply chain issues in energy sector | |
| EMPLOYMENT | Argonne National Laboratory , Energy Systems, Argonne, IL. Center for Energy, Environmental, and Economic Systems Analysis (CEEESA) STA - Engineering Systems Modeling, June 2015 - present Postdoctoral Appointee, April 2012 - June 2015 Research projects: Environmental impact assessment, hydroelectric systems modeling, demand response through electric vehicles, stochastic unit commitment modeling with wind power uncertainty, grid-level energy storage, financial transactions for buildings, agent-based modeling of global helium markets | |
| EDUCATION | The University of Chicago , Booth School of Business, Chicago, IL. Ph.D. in Management Science/Operations Management, 2012. Master of Business Administration, 2011. Koç University , İstanbul, Turkey. M.S. in Industrial Engineering, 2006. Marmara University , İstanbul, Turkey. B.S. in Industrial Engineering, 2003. | |
| HONORS AND AWARDS | Eugene F. Fama Ph.D. Fellowship (2010 - 2011) TA Award for Exceptional Service to the EMBA Program (Singapore, London), 2010 Katherine Dusak Miller Fellowship (2009 - 2010) University of Chicago Doctoral Fellowship (2006 - 2009) The Scientific and Technological Council of Turkey (TÜBİTAK) Scholarship to support M.S. Thesis (2005 - 2006) Vehbi Koç Scholarship for graduate study, Koç University, covering tuition and monthly stipend (2004 - 2006) | |
| JOURNAL PUBLICATIONS | “Investment in Improved Inventory Accuracy in a Decentralized Supply Chain,” with F. Karaesmen, and S. Savaş. <i>International Journal of Production Economics</i> , 113(2) 546-566, 2008. “An Improved Stochastic Unit Commitment Formulation to Accommodate Wind Uncertainty,” with A. Botterud and J. Birge. accepted at <i>IEEE Transactions on Power Systems</i> , 2015. | |
| WORKING PAPERS | “Smart Homes with Price-Responsive Thermostats,” with D. Adelman. Under revision for second round review at <i>Operations Research</i> . “Flexible Operation of Batteries in Power System Scheduling with Renewable Energy,” with Nan Li, Emil Constantinescu, J. Birge, K. W. Hedman and A. Botterud. Under revision for second round review at <i>IEEE Transactions on Sustainable Energy</i> . | |

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| MANUSCRIPTS IN PREPARATION | <p>“Characteristics of Storage Modeling Considering Day-Ahead and Real-Time Market Price Uncertainty,” with D. Krishnamurthy, Z. Zhou, P. Thimmapuram and A. Botterud.</p> <p>“Nonlinearly Parameterized Basis Functions for Revenue Management,” with D. Adelman and C. Barz.</p> |
| CONFERENCE PROCEEDINGS | <p>“Patterns of Electric Vehicle Charging with Time of Use Rates: Case studies in California and Portland,” with M. Biviji, G. Bassett, J. Wang, and D. Ton. <i>IEEE Power and Energy Society, Innovative Smart Grid Technologies Conference 2014</i>.</p> <p>“Improving Electricity Markets to Accommodate a Large-Scale Expansion of Renewable Energy,” with A. Botterud and J. Birge. <i>International IIE Conference 2013</i>, İstanbul, Turkey, June 26-28, 2013.</p> <p>“Dynamic Electricity Pricing for Smart Homes,” with D. Adelman. <i>MSOM Annual Conference 2011</i>, Ann Arbor, Michigan, June 26-28, 2011.</p> <p>“Investment in Improved Inventory Accuracy in a Two-stage Supply Chain,” with F. Karaesmen, and S. Savaş. <i>International Conference on Information Systems, Logistics and Supply Chain, ILS2006</i>, Lyon, France, 2006.</p> |
| FUNDING | <p>Collaborator of the “Grid-Level Energy Storage for Integration of Renewable Energy” LDRD Award, Argonne National Laboratory, \$600K, Awarded, 2013-2015</p> |
| MEDIA MENTIONS | <p>“Next generation thermostats: Cool air, cooler savings”, <i>Capital Ideas</i>, Fall 2013 issue.</p> |
| PRESENTATIONS & INVITED SEMINARS | <p>“<i>Improving Electricity Markets to Accommodate a Large-Scale Expansion of Renewable Energy</i>”</p> <ul style="list-style-type: none"> - INFORMS Annual Meeting, San Francisco, CA, 2014 - 20th Conference of IFORS, Barcelona, Spain, 2014 - FERC’s Technical Conference on Increasing Real-Time and Day-Ahead Market Efficiency through Improved Software, Washington, D.C., 2014 - INFORMS Annual Meeting, Minneapolis, MN, 2013 - International IIE Conference, İstanbul, Turkey, 2013 <p>“<i>Dynamic Pricing of Electricity for Smart Homes with Price Responsive Appliances</i>”</p> <ul style="list-style-type: none"> - University of Illinois at Chicago, Department of Information and Decision Sciences, Chicago, IL, 2014 - Annual POMS Conference, Chicago, IL, 2012 - Northwestern University, Kellogg School of Management, Chicago, IL, 2012 - Guest speaker at the Ph.D. course “Emerging Areas in Operations Management” - IIT Stuart School of Business, Chicago, IL, 2011 - INFORMS Annual Meeting, Charlotte, NC, 2011 - Argonne National Laboratory, Argonne, IL, 2011 - MSOM Annual Conference, Ann Arbor, Michigan, 2011 - INFORMS Revenue Management and Pricing Section, Columbia University, NY, 2011 - INFORMS Annual Meeting, Austin, TX, 2010 <p>“<i>Nonlinearly Parameterized Basis Functions for Revenue Management</i>”</p> <ul style="list-style-type: none"> - INFORMS Annual Meeting, San Diego, CA, 2009 - INFORMS Revenue Management and Pricing Section, Evanston, IL, 2009 - INFORMS Annual Meeting, Washington, DC, 2008 |

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| TEACHING EXPERIENCE | <p>The University of Chicago, Booth School of Business, Chicago, IL.</p> <ul style="list-style-type: none"> - Teaching Assistant for regular and part-time MBA students, 2006 - 2012. Courses: Operations Management, Revenue Management, Managerial Decision Modeling - Teaching Assistant for Executive MBA program, 2010. Course: Operations Management, TA evaluations: 4.4/5.0 (Singapore) and 4.7/5.0 (London). <p>Koç University, İstanbul, Turkey.</p> <p>Teaching Assistant, 2004 - 2006.</p> <ul style="list-style-type: none"> - Operations Management (undergraduate level) | |
| OTHER EMPLOYMENT | <p>Temsa Automotive, İstanbul.</p> <p>Human Resources Specialist, 2003 - 2004.</p> <ul style="list-style-type: none"> - Worked on performance management and job appraisal projects. - Prepared position descriptions and updated organization charts. - Assisted management of compensation and benefits. <p>TÜSSİDE (Turkish Institute for Industrial Management), Gebze.</p> <p>Assistant, 2002.</p> <ul style="list-style-type: none"> - Organized training activities, prepared reports on training results. <p>Eczacıbaşı Vitra, İstanbul.</p> <p>Intern, 2001.</p> <ul style="list-style-type: none"> - Performed the routine controls of warehouse by using SAP. - Prepared a facilities layout project in Quality Control part of the factory. | |
| SERVICE | <ul style="list-style-type: none"> - Reviewer: <i>Operations Research</i>, <i>INFORMS Journal on Computing</i>, <i>IIE Transactions</i>, <i>IEEE Transactions on Power Systems</i>, <i>IEEE Transactions on Smart Grid</i>, <i>Wind Energy</i>. - Dissertation Committee Member: Ferdi Eruysal, "Business intelligence and smart pricing in uncertain competitive environment," Information and Decisions Sciences, University of Illinois at Chicago. | |
| COMPUTER SKILLS | <p>Programming Languages: AMPL, LaTeX, Visual Basic, Turbo Pascal, FORTRAN</p> <p>Operating Systems: Mac OS X, MS Windows</p> <p>Tools: Matlab, Mathematica</p> | |
| SELECTED COURSES | <p>Optimization</p> <ul style="list-style-type: none"> - Convex Optimization - Dynamic Programming - Integer Programming - Stochastic Programming <p>Operations Management</p> <ul style="list-style-type: none"> - Operational Pricing - Warehousing/Distribution <p>Mathematics and Statistics</p> <ul style="list-style-type: none"> - Analysis I, II - Stochastic Processes I, II | <p>Economics</p> <ul style="list-style-type: none"> - Price Theory I, II - Empirical Analysis - Numerical Methods in Economics - Economics of Information - Advanced Micro Analysis <p>MBA courses</p> <ul style="list-style-type: none"> - Operations Management - Financial Accounting - Macroeconomics - Managing the Workplace - Marketing Strategy |
| PERSONAL | U.S. permanent resident. Married. | |